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# Agricultural Memorandum No. 433

## Dry Spells in April in Eastern England

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A previous memorandum on Spells of Dry Weather in Eastern England was published by MAFF (NAAS) in January 1953. The attached tables are a summary of these results in regard to 25 stations for the month of April.

The years considered were 1921-1946.

Table 1 gives the total frequency in 26 years of dry spells of varying lengths, averaged over 6 sub regions, namely:

Lincolnshire
Cambridge, Isle of Ely, Soke of Peterborough
Bedfordshire, Hertfordshire
Norfolk
Suffolk
Essex

Table 2 gives the cumulative frequencies.

Table 3 gives the chances of such spells happening in any one year

The differences from region to region are small, but probably climatologically significant.
The significance for operational farming is minimal, the main controlling factor within this low rainfall area is probably the type of soil and the time it takes to dry out in the top layer.

Any comments or suggestions on this paper should be referred to the author

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TABLE 1

Number of dry spells in 26 years in April

| | 3 days | 4 days | 5 days | 6 days | 7 days | 8 days | 9 days | 10 days | 11 days | 12 days | 13 or more days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lincolnshire | 16.3 | 10.2 | 7.0 | 6.7 | 2.0 | 4.3 | 1.0 | 1.7 | 1.3 | 1.0 | 2.7 |
| Cambridge and Isle of Ely | 16.0 | 8.2 | 8.2 | 5.6 | 3.4 | 2.8 | 2.2 | 2.0 | 2.4 | 1.0 | 3.2 |
| Bedford and Hertford | 13.7 | 7.3 | 7.3 | 2.7 | 2.7 | 2.9 | 1.5 | 2.7 | 2.0 | 0.0 | 4.3 |
| Norfolk | 18.2 | 13.0 | 6.8 | 4.9 | 4.0 | 3.5 | 1.8 | 2.3 | 1.2 | 1.2 | 1.6 |
| Suffolk | 12.5 | 10.7 | 9.5 | 5.7 | 4.3 | 3.0 | 3.5 | 0.7 | 1.7 | 1.5 | 1.5 |
| Essex | 10.7 | 7.6 | 7.5 | 4.4 | 5.5 | 4.7 | 3.0 | 1.7 | 2.3 | 0.5 | 2.5 |

TABLE 2

Cumulative frequencies

| | 3 or more | 4 or more | 5 or more | 6 or more | 7 or more | 8 or more | 9 or nore | 10 or more | 11 or more | 12 or more |
|---|---|---|---|---|---|---|---|---|---|---|
| Lincoln | 54.2 | 37.8 | 27.7 | 20.7 | 14.0 | 12.0 | 7.7 | 6.7 | 5.0 | 3.7 |
| Cambridge | 55.0 | 39.0 | 30.8 | 22.6 | 17.0 | 13.6 | 10.8 | 8.6 | 6.6 | 4.2 |
| Beds, Herts | 47.1 | 33.4 | 26.1 | 18.9 | 16.1 | 13.4 | 10.5 | 9.0 | 6.3 | 4.3 |
| Norfolk | 55.9 | 37.7 | 27.3 | 20.5 | 15.6 | 11.6 | 8.1 | 6.3 | 4.0 | 2.8 |
| Suffolk | 54.7 | 42.3 | 31.5 | 22.0 | 16.3 | 12.0 | 9.0 | 5.5 | 4.7 | 3.0 |
| Essex | 50.0 | 39.3 | 31.6 | 24.1 | 19.7 | 14.3 | 9.5 | 6.5 | 4.7 | 3.0 |

TABLE 3

Chances (out of 100) of a dry spell in April

| | 3 or more | 4 or more | 5 or more | 6 or more | 7 or more | 8 or more | 9 or more | 10 or more | 11 or more | 12 or more | 15 or more days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lincolnshire | 97 | 86 | 75 | 64 | 53 | 41 | 29 | 24 | 19 | 14 | 8 |
| Cambridge, Isle of Ely | 99 | 88 | 78 | 68 | 58 | 48 | 39 | 31 | 23 | 16 | 9 |
| Bedford and Hertford | 95 | 83 | 72 | 61 | 53 | 45 | 38 | 30 | 23 | 16 | 13 |
| Norfolk | 98 | 85 | 72 | 59 | 49 | 39 | 29 | 23 | 17 | 11 | 5 |
| Suffolk | 97 | 87 | 77 | 67 | 56 | 45 | 34 | 26 | 19 | 12 | 4 |
| Essex | 99 | 90 | 82 | 74 | 62 | 50 | 38 | 31 | 24 | 17 | 11 |